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The importance of contextual aspects in the care for patients with functional somatic symptoms

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ABSTRACT

Functional somatic symptoms refer to physical symptoms that cannot be (bio) medically explained. The pattern or clustering of such symptoms may lead to functional syndromes like chronic fatigue syndrome, fibromyalgia, irritable bowel syndrome, among many others. Since the underlying pathophysiology remains unknown, several explanatory models have been proposed, nearly all including social and psychological parameters. These models have stimulated effectiveness studies of several psychological and psychopharmacological therapies. While the evidence for their effectiveness is steadily growing, effect-sizes are at most moderate and many patients do not benefit.

We hypothesize that the context in which interventions for functional somatic symptoms are delivered substantially influences their effectiveness. Although this hypothesis is in line with explanatory models of functional somatic symptoms, to our knowledge, studies primarily focusing on the influence of contextual aspects on treatment outcome are scarce. Contextual research in the field of somatic symptoms has (irrespective whether these symptoms can be medically explained or not), however, just begun and already yielded some valuable results. These findings can be organized according to Duranti's and Goodwin's theoretical approach to context in order to substantiate our hypothesis. Based on this approach, we categorized empirical findings in three contextual aspects, i.e. 1) the setting, 2) the behavioural environment, and 3) the language environment. Collectively, some support is found for the fact that early identification of patients with functional somatic symptoms, starting treatment as soon as possible, having a neat appearance and an organized office interior, a warm and friendly nonverbal approach and a language use without defensiveness are contextual parameters which enhance the assessment by the patient of the physician's competence to help. Nonetheless, in vivo studies addressing the most aspects, i.e. nonverbal behaviour and language, are needed for better understanding of these contextual aspect. Moreover, future research should address to what extent optimizing contextual aspects improve care for functional somatic symptoms.

Introduction

The experience of medical illness is a complex, multidimensional phenomenon. In 25 to 50% of the patients of medical specialty outpatient's clinics, there is no specific conventional biomedical explanation available for the patient's complaints [1]. These so-called functional somatic symptoms often result in unnecessary diagnostic procedures, high costs of healthcare, and may cause frustration on the side of both doctor and patient [2-4]. There are indications that the group of patients with functional somatic symptoms is still growing [5,6].

Current treatment options for lessening severity or impact of unexplained physical symptoms include medication, different forms of cognitive behavioural therapy and different forms of psychodynamic therapy as well as physical therapy. Efficacy of these treatment options has been shown in controlled clinical trials [7,8]. The question remains how effective these treatments options are in daily practice as effect sizes are at most moderate. A relatively ignored aspect in this regard is the context in which care of patients with functional somatic symptoms takes place. In other words, offering patients with apparently similar symptoms same treatment does not mean same outcome. For example, there is growing evidence that cognitive behavioural therapy (CBT) in secondary care outperforms results that can be achieved by CGT given in primary care [9]. Moreover, in some studies patients even rated their overall health as worse after CBT [10]. Not only setting matters, but also the conduct of individual physicians in the consulting room

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influences the treatment outcome [11,12]. Interactions with physicians might even act as perpetuating factors, contributing to chronicity of symptoms [13]. A literature search in PubMed and PsychINFO using search strings consisting of the terms context and medically unexplained symptoms or its synonyms, however, did not reveal any specific literature on contextual aspects of diagnosis and treatment of functional symptoms.

Hypothesis

We hypothesize in this commentary that contextual aspects in medical encounters contribute to effective care for patients with functional somatic symptoms.

To ground this hypothesis, we first describe the various contextual aspects to be considered, using the theoretical framework developed by Duranti and Goodwin [14] for analysing the relationship between a focal event and its context. Next, we review the evidence regarding their impact on the effectiveness of medical care for functional somatic symptoms and, when not available, to chronic somatic diseases. Finally, we discuss how the use of contextual parameters may improve the outcome of medical care for patients with functional somatic symptoms. Whenever our ideas were fuelled by our clinical experiences, this is clearly indicated, in order to separate those ideas from the ones that were based on literature and followed by a reference.

Contextual aspects of care

The theoretical framework by Duranti and Goodwin [14] is based on the premise that context is a frame that surrounds the event being examined, and provides resources for its appropriate interpretation. The context is described as an act of (re) creation by which people make sense of an event, rather than a fixed outer reality. In line with their approach, diagnosis and treatment, which often are considered to be standardized factors in efficacy studies, cannot be properly understood without considering their context. The framework of Duranti and Goodwin distinguishes four parameters of context, i.e. 1) the setting, 2) the behavioural environment, 3) language as context, and 4) the extrasituational context. The extrasituational context relates to more general cultural knowledge that influences human interaction patterns, and thus extends far beyond the concrete situational phenomena of setting, behaviour and talk. Therefore, only the first three contextual aspects will be discussed with regard to diagnosis and treatment of functional somatic symptoms.

The setting

The setting comprises the physical surroundings as well as the temporal organization in which encounters are situated [14]. For patients with functional somatic symptoms the physical surrounding includes, among others, the design of the consultation room and whether or not the physician wears a white coat. The temporal organization refers to the number and timing of consultations.

Most patients with functional symptoms are initially seen in the medical technical surroundings of somatic departments [15], which may vary from consultation rooms of general practitioners, emergency departments of general hospitals, to secondary care outpatient clinics. When possible physical causes have been ruled out in these settings, patients are still often reassured that nothing is wrong and very occasionally referred to mental health care. If patients with functional somatic symptoms are referred to a mental health care professional, no studies have examined the acceptability of the location of the initial contact. In our experience patients with functional somatic symptoms show a strong preference for a medical setting instead of a psychiatric outpatient clinic. The preference for an encounter in a non-psychiatric setting is most likely related to stigma associated with psychiatric disorders [16,17].

Some research has been conducted on the effects of the physical surroundings on the clinical encounter. Two different studies allocated general medical patients randomly to a standard room or an experimental consultation room designed with a semi-circular table in which physician and patient had equal access to the computer screen and thus to the electronic medical record. More patients in the experimental rooms than in the standard rooms reported that their physician shared information on the screen. However, this did not translate in a higher level of patient satisfaction with the consultation, mutual respect, or communication quality [18,19]. In psychotherapy research, the design of the consultation room of the psychotherapist has been shown to influence the quality, care and comfort expected by the patient. Chaotic and cramped offices may decrease the patient's perception of safety and his or her expectation of benefit [20,21].

The impact of the physicians' dress style has been studied more often. Patients generally prefer their medical specialist to wear a white coat [22-24] and are more willing to share their social, sexual, and psychological problems if a physician is professionally dressed in a white coat [22]. The only study, in which a preference for a semiformal dress style over formal suits and white coats was found, might be confounded by the smiling face of the semi-formally dressed physician on the photograph that was shown to the participants in this study [25]. Interestingly, these findings do not apply to psychiatrists and general practitioners [26-28]. In one study, 96% of the patient population preferred their psychiatrist not to wear a white coat, although 58% did not think it would make a difference in their relationship with their doctor [27]. Collectively, current studies do not suggest that the physical surroundings are a crucial contextual parameter in the care for patients with functional somatic symptom.

The other important aspect of setting is the temporal organization of care. Often it takes many months before patients with persistent functional symptoms can get to a specialty referral centre. Meanwhile deep-rooted, maladaptive cognitive behavioural patterns and illness behaviours develop, reducing the chances of successful treatment outcome. This is especially the case when patients have applied for or already receive a disability benefit [29]. Patients, who were treated shortly after their diagnosis, benefit most from the treatment programs. It is therefore advised to start treatment as soon as possible [29].

Another aspect of temporal organization is the optimal number of treatment sessions and the optimal duration of the treatment. A *meta*-analysis showed that a higher number of psychotherapy sessions was associated with a larger reduction of physical symptoms, disorder-specific cognitions, emotions, behaviours, and depressive symptoms. This might be explained by the fact that most studies included patients who had functional somatic symptoms for years and thus require time to develop new coping strategies [7]. Still, fewer sessions do not automatically mean inferior results. For example, no difference was found between 8 and 16 psychotherapy sessions with regard to social function and severity of depression in a dose–effect psychotherapy study for major depression [30]. Such studies should also be conducted with patients with functional somatic symptoms.

Behavioural environment

The behavioural environment is defined as the way persons use their body and behaviour as a resource for framing and organizing their talk [14]. This concept thus refers to nonverbal behaviour. Nonverbal behaviour is important in social interactions as approximately 80% of essential communication between persons occurs nonverbally [31]. The impact of nonverbal behaviour is indirectly demonstrated by a study showing that parental reassurance on child distress during painful medical interventions was associated with a higher rating of parental fear and increased child distress, whereas parental distraction was associated with the opposite. This finding could be explained by the facial expressions of parents, which are a nonverbal, emotional cue to the child [32]. In the medical communication research, however, nonverbal

behaviour has received far less attention than verbal behaviour [31,33]. Non-verbal behaviour can be distinguished in speech-related and speech-unrelated nonverbal behaviour. Examples of speech-related nonverbal behaviours are speech rate, interruptions, and hesitations [33,34]. As speech-related nonverbal behaviours are intrinsically linked to other aspects of speech, they are discussed in the next section on the language environment.

Examples of speech-unrelated nonverbal behaviour are spatial orientation, gazing, nodding, body movements, and facial expressions. Speech-unrelated nonverbal behaviour is among the first of all physician characteristics a patient will notice in a clinical encounter. In a systematic review, it was concluded that physicians who adopt a warm, friendly, reassuring manner are more effective than those who keep consultations formal and do not offer reassurance [35]. This review concerned a clinical population with a somatic disease; other studies suggest that this finding might also apply to patients with functional somatic symptoms. A review on effectiveness of empathy in general practice, in which many consultations concern functional symptoms, concluded that empathy increased patient satisfaction and adherence, reduced patients' anxiety and distress, resulted in better diagnostic and clinical outcomes, and strengthened patients' enablement [59]. A qualitative study showed that experts on functional somatic symptoms highlight the importance of a warm empathic relationship in order to create a safe therapeutic environment [36]. A three-arm randomised clinical trial on the effectiveness of interactional styles during a placebo treatment for irritable bowel syndrome indeed found the largest improvement in symptoms with a warm interactional style as compared with a neutral interaction style or being on a waiting list [37,38].

While empathy is regarded as one of the most relevant aspects of speech-unrelated nonverbal behaviour, it remains difficult to define empathy in terms of speech-unrelated nonverbal behaviour. Empathy, the capacity to experience what others experience, is a highly integrated process involving cognitive, emotional and somatic phenomena [39]. Despite of this complexity, empathy is typically measured in a very basic way. The available studies do not describe the nonverbal behaviour component of the warm, empathic interaction, but simply measure empathy with self-report questionnaires. These questionnaires contain items like 'the physician was willing to listen to the patient', 'the physician was open to the ideas of the patient' or even 'the physician was emphatic'. Such items are inconsistent with a more fine grained approach to empathy, in which it's affective, cognitive and verbal and nonverbal behavioural components are recognized [59].

More is known about the nonverbal behaviour aspects of expressiveness. Patients like their physicians to be expressive. It promotes positive clinical outcomes [40]. Expressiveness is reflected in less reading the medical chart, more forward lean, more nodding, and much smiling, gestures, closer interpersonal distance, and congruent eye-contact [34]. Congruent eye-contact means that the eye contact of the clinician is in line with the amount of eye-contact of the patient. Gazing can be an expression of interest and greater eye-contact results in more effective reading of emotional cues. However, gazing can also be perceived as a threat, especially during persuasive communication. In such situations, gazing might even lead to less change in the desired direction [41]. When considering the concepts of empathy and expressiveness, we conclude that expressiveness is a sign of empathy put into practice.

With respect to functional symptoms, empathy should not be confused with reassurance. Straightforward reassuring statements (affective reassurance) are not associated with greater patient trust, greater satisfaction, or a feeling of being supported in decision-making. They might even increase patient anxiety [42-44]. Furthermore, a recent systematic review and *meta*-analysis showed that reassurance based on diagnostic testing does not reduce illness concern, health anxiety, or symptoms [4]. However, informing patients about the meaning of potential negative results before the diagnostic test might lead to better assimilation of reassuring messages [60] There is also growing evidence that understanding the worrying cognitions of patients and addressing them with specific information (cognitive reassurance) can help patients to change these worrying cognitions into more helpful ones [44,61,62]. None of these studies specifically dealt with the nonverbal aspects of communicating reassurance. Future studies should decompose the specific components and their behavioural aspects to further explore when reassurance might be effective [44,45].

Language environment

The third contextual aspect to be discussed, language environment, is defined as the way in which talk both invokes context, and provides context for other talk [14]. While physician patient encounters are framed in a well-defined medical context, physician and patients do not necessarily share rules of relevance and irrelevance. For instance, a nice open question of the GP "What has brought you in today?" can be interpreted by a depressed patient as "Tell me about your physical complaints" leading to a consultation about fatigue.

What is said and the way it is said, is related to previous experiences resulting in assumptions on which the patient and the physician rely to maintain conversational involvement, assess what is intended. In this partly subconscious, interactional process, how things are said is important for creating meaning. For instance, it makes a difference if something is said straightforward and without hesitation or with a show of words, self-corrections and repetitions [14].

Another important speech-related factor are interruptions. Studies among general medical patients showed that patients an average only spoke for 12 s before being interrupted by the physician; one in four patients was interrupted before he or she had finished speaking. Early and increased interruptions were associated with less patient satisfaction, due to the perception of the patients that they should have talked more [46].

In the field of functional somatic symptoms, several studies on the physician patient interaction have been performed by questionnaires and interviewing, especially about mutual, stereotype, negative images [47-49]. Although important, such studies do not provide information on what is actually happening in clinical interactions. One research group has specifically addressed this by analysing physician patient interactions using audio tapes of consultations [2,15,43,50-52]. They repeatedly found that patients with functional somatic symptoms present many opportunities, albeit often ignored, to general practitioners to address psychological needs.

These qualitative studies, however, use content-oriented methods or coding schemes, and thus ignore the more detailed, micro-interactional context in which the doctor patient conversation occurs and gets it actual meaning. Thus far, two studies applied conversation analysis to describe the interactional and linguistic resources used by patients and physicians [53] and patients and therapists [54] while discussing the diagnosis of functional somatic symptoms and its psychological treatment. Both studies revealed objective interactional problems. On the physician side, interactional problems are reflected in high levels of formulation effort, extensive accounting activities and cautiousness in the physicians' communication behaviour. Formulation effort refers to the use of silences, repetitions, self-corrections, syllable stretching, self-interruptions, cut-offs, and related phenomena while talking. Formulation effort was most evident in conversational sequences in which patients' resistance was unmistakable. This was especially found when physicians discussed the psychosocial aetiology and treatment recommendations, and found less when they summarized the problems or discussed test results. However, formulation effort was not fully explained by the level of resistance encountered, as it was already apparent before patients showed any resistance. This unintended communication behaviour of the physicians may be explained by the assumption of communicating an unwelcome message and expectations of resistance [53]. Communicative behaviours thus often reflect a doctoŕs underlying attitude towards the medical problem encountered,

which in itself may lead to confusion and negative reactions of patients.

A second aspect of interactional problems is extensive accounting activities. Accounting activities refer to the way in which physicians make explicit the grounds on which their statements are based. Interestingly, physicians use two different linguistic scenarios in their accounting activities, depending on the degree of diagnostic certainty. In case of diagnostic certainty, medical authority is enhanced by taking a “we” stance thereby referring to expertise of other doctors. However, in case of diagnostic uncertainty as with functional somatic symptoms, an “I” stance is taken to underline their medical authority, with statements like “according to my opinion” and “I believe”. Physicians use their professional authority to make it more difficult for patients to challenge their diagnostic conclusions [55].

The third interactional aspect is cautiousness in the physicians’ communication behaviour. For example by acknowledging the severity of the patient’s symptoms, physicians as well as therapists are very careful to avoid any misinterpretations by patients that their symptoms are not real [54,55].

Collectively, these studies show that physicians dealing with patients with functional symptoms often speak in a way that is confusing to patients, reflecting uneasiness and defensiveness. Patients’ first answer to these complex interactional moves of their physicians is to reject, invalidate or ignore provided explanations according the ‘yes, but..’ principle [54]. A lack of a shared explanation provides a barrier to a constructive physician-patient interaction and to effective care.

Concluding remarks

As pointed out, contextual aspects are important in clinical care, and probably most important when facing patients with functional symptoms. Considering the disease burden and prognosis of (severe) functional symptoms, we hypothesize that optimizing contextual aspects will improve clinical care, and decrease the suffering and/or, increase feelings of being understood.

Remarkably, context research is mainly undertaken in general medical care and rarely in care for patients with functional symptoms. Also, context research is often conducted out of the context of the actual encounter between doctor and patient. For example, instead of appraising real physicians by their own patients on their appearances or real patients on the design of their psychotherapist office, studies are simplified by using only photographs to elicit opinions, which may overestimate the importance of setting (e.g. dress style) over other aspects of the communication [56]. After all, actual encounters with doctors provide patients with more to experience and appraise than appearance.

Studies of contextual aspects of communications so far are limited, but they yield already valuable suggestions for improving the clinical encounter with patients with functional somatic symptoms. With respect to setting, having a neat appearance and organized office room may be a good starting point for medical interactions with patients with functional somatic symptoms. Probably of greater importance is the delay between onset of symptoms and start of treatment. With respect to nonverbal behaviour all studies thus far point in one direction: patients with functional somatic symptoms are likely to benefit from a warm empathic relationship, while straightforward reassuring statements might have an adverse effect [42]. While in our clinical experience a warm empathic relationship is even more important for treatment outcome in patients with functional somatic symptoms than in patients with a physical illness, providing such a warm and empathic relationship may be far from easy for the physician dealing with this type of patient. After all, he or she has to move beyond his or her knowledge comfort zone and let go preconceived ideas of a difficult patient requesting somatic intervention [57]. Regarding the language environment, i.e. how and in which context things are said instead of what is being said, available studies point to interactional problems characterized on the physician’s side by formulation effort, accounting activities and implicit and careful formulations. These communication phenomena, presumably reflecting the assumption of communicating an unwelcome message, induce or strengthen resistance by the patient.

We would like to acknowledge that our paper may be culturally biased in interpreting and judging contextual elements by standards inherent to western cultures. The effects of the contextual elements we discussed might differ between cultures. A systematic review showed nonverbal expressions of empathy to vary across cultural groups: some nonverbal behaviours appeared universally desired and others culturally specific [63]. It seems likely that such culturally determined differences also apply to other contextual determinants such as appearance or behaviour of the physician. Another aspect that we did not discuss is how sex and gender might modify the effects of contextual factors on patient outcomes. An experimental study suggests that pain tolerance is influenced by the interaction between the experimenter sex and subject sex: subjects tolerated pain longer when they were tested by an experimenter of the opposite sex. Prolonged pain tolerance was also observed in case of experimenters with high professional status as opposed to those with low professional status [64]. It remains to be determined how such contextual aspects in physician-patient interactions influence care for functional somatic symptoms.

Future directions

In following the three parameters of context according to Duranti and Goodwin we realize that we too have drawn boundaries between phenomena that are actually interconnected. The fact that context is not simply “out there”, that it is made up of mutual reinforcing effects, makes it difficult to get a grasp on. For instance, it is quite conceivable that nonverbal behavioural is affected by wearing a white coat, but to our knowledge no study has been done on this subject. To overcome the problem of losing sight of the dynamic interactions between contextual phenomena, we argue in favour of in vivo studies of real medical encounters done for example with mystery patients [42] or with video recordings of medical encounters.

Communication skills are extremely important since the dialogue is the starting point of dealing with these symptoms and patients must be challenged to take their part in their recovery. More awareness of and training in the non-verbal behaviour aspect of empathy might be helpful for physicians in providing care for patients with functional somatic symptoms. A warm, friendly doctor, who is willing to listen and give support, will probably do best. More research is necessary to determine the optimal use of the body language in dealing with this patient group. A recently developed teaching tool called E.M.P.A.T.H.Y. might be helpful to enhance the sensitivity of physicians for perceiving and responding to non-verbal emotional cues [58]. One other aspect that should be targeted in the medical training is the attitude towards functional symptoms, as communicative behaviours are often reflections of underlying attitudes. When these contextual aspects are optimized, the impact of setting needs to be reassessed.

Medical care is more than content; as acknowledged by Osler, physicians deal with patients instead of with diseases. We hope our hypothesis will stimulate research groups to empirically examine the impact of contextual factors in the treatment of patients with functional symptoms, as optimizing contextual aspects may substantially increase effectiveness of currently available interventions.

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